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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/607,324 06/30/00 NAKAGAWA

N 2927-113P

EXAMINER

MM91/0605

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ALLEN, A

ART UNIT

PAPER NUMBER

2855

DATE MAILED:

06/05/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/607,324

Applicant(s)

NAKAGAWA ET AL.

Examiner

Andre J. Allen

Art Unit

2855

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claims ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892)
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 18) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other: _____

DETAILED ACTION

Specification

1. *Applicant is reminded of the proper language and format for an abstract of the disclosure.*

*The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 250 words. It is important that the abstract not exceed 250 words in length since the space provided for the abstract on the computer tape used by the printer is limited. **The form and legal phraseology often used in patent claims, such as "means" and "said,"** should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.*

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

Claim Rejections - 35 USC § 112

2. *The following is a quotation of the second paragraph of 35 U.S.C. 112:*

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 is narrative in form and does not clearly set forth what the invention is suppose to be.

With respect to claim 5 "the whole length" has no antecedent basis.

With respect to claim 9 "the like" has no antecedent basis. This is an improper claim. This is not a product by process claim, but instead a method of "use" and therefore is improper.

Claims 10-15 do not provide method limitations and therefore is improper.

With respect to claim 10 "the stress wave curve" has no antecedent basis.

With respect to claim 15 "said impact bar HAS NO ANTECEDENT BASIS. (AA)

Claim Rejections - 35 USC § 103

3. *The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:*

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Document 1 in view of document 2. Document 1 teaches a viscoelastic characteristic value-measuring apparatus and method comprising: an input bar B [fig. 7.1] (claim 1), an output bar C (claim 1), a striker bar/impact bar A (claim 1), said bars are circular (claim 8) being arranged in a straight line to withhold a specimen S, a first and second strain gauge Gb Gc located on the input bar and output bar and a third strain strain gauge G3 (claim 1) (claim 5 6) used to measure a transmitted wave p. 174 and 178, a method of striking the input bar (claim 15) with a specimen held therein p. 173

(claim 9) to generate an incident wave and reflected wave (claim 9) p 174, a method of measuring and determining a strain wave, estimating a history, and computing characteristics using Young's Modulus p. 176 (claim 9 10), However document 1 does not teach the length of the input bar to be smaller than that of the output bar, said bars to be made from a polymer, said bars having a viscoelastic characteristic which is different from the specimens, a fourth strain gauge, a 4% 25% 8% and 50% spacing of said strain gauges, intervals of 200mm to 1200mm and 30mm to 400mm, bars having a sectional are of 10mm to 30mm, use of a low pass filter and the length of the specimen to be 1mm to 15mm. Document 2 teaches impact compression characteristics of viscoelastic materials comprising an input bar and output bar made of a polymer [introduction] (claim 3), said stress bars having a diameter of 20.5mm (claim 8) and a length of 1000mm (claim 1) a specimen made of hard rubber, soft rubber and polyester resin (claim 4), strain gauges 1 to 4 sec. 3.2 set at distances of 300mm and 100mm p. 26 (claim 7), and length of the specimen set at 8mm p. 26 (claim 14).

With respect to the spacing of the strain gauges at 4%,25%,8% and 50% it would have been obvious to one having ordinary skill in the art at the time the invention was made to design the strain gauges at some type of percentage of spacing since it has been held that mere duplication of the essential working parts involves only routine skill in the art. St. Regis Paper co. v. Bemis co., 193 USPQ 8

With respect to a low-pass filter, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use a low-pass filter to filter a high frequency noise since it was known in the art that use of a low-pass filter to reduce unwanted noise is common as taught in US patent 6236939

Since the references of Document 1 and document 2 are both from the same field of endeavor, the purpose disclosed by document 2 would have been recognized in the pertinent art of document 1.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the Hopkinson Bar Method taught in Document 1 with a fourth strain gauge, bars made of a polymer, specific spacing of the strain gauges and said bars and a specific range of size of the specimen as taught by Impact compression characteristics taught in Document 2 for the purpose of optimum measuring characteristics of a viscoelastic material.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andre J. Allen whose telephone number is 703-3081989. The examiner can normally be reached on mon-fri 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ben Fuller can be reached on 703-308-0079. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-3432 for regular communications and 703-308-3432 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

A.J.A.
June 4, 2001



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